Work Order ID 121223 June-18-14 1:55:23 PM				*121	223*			_				Page 1
Revision ID:	D3454-3 Bushing			Accept	*N900	040	100) *	Setup	Start Stop	1 /1	S1*
Start Date: Required Date: Reference:	6/18/14 6/18/14	Start Qty: 40.00 Req'd Qty: 40.00	717		Cust Item Customer:						14	. 12
Approvals:		Plan: MUS	Date: <u>1406-18</u>	Tooling: SPC (Y/N):	_	ate:			Run	Start Stop	^IVI	R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	R	Revision Nbr				Added to add to a						
D3454	R	lev B										
*100 *100* Hardinge Hardinge CNC Lath	e Small	Hardinge CNC LATHE Memo 1-TURN A REV: <u>¶/A</u>	S PER FOLIO FA571 & DW DWG REV:	0.00 0.00 · G D3454 ,FOLIO DEBURR AS REQUIRE	ED			DA: 02 9-8:	s g		4-07	207
110		QC2- Inspect parts off	machine FAI/FAIB	0.00								
110 QC Quality Control		Memo		0.00				94 0	AS	- ('	4-07.0	17
,												
*120		QC8- Inspect parts - se	cond check	0.00				93	j	Ø .		NH
QC Quality Control		Мето		0.00						; -		111/0

DQA:			. Date: _						•				TOAF	?T
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	W	ork Order up	odate only	AEROSF	ACE
						DISPOSITION			AGAINST		PARTMENT	1.	<u></u>	
Work Orde	er: _						. !			_	7	_		
						Rework			Skid-tube Crosstube	_		Water Jet	Engineering	-
Part N	۰ ا					Scrap			Machining Small Fab	-	-{	d. Eng. Coor.	Quality	
						Use-as-is		Therr	moforming Finishing	—	Rec/Stoi	e/Packaging	Other	<u> </u>
NCR N	No					Suspected Unapproved	İ		Large Fab Composite	<u>'</u>	J	Supplier		Ш
Root					Desc	ription of work order update		nitial	Action		Sign &			<u> </u>
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspect	tor
Design														
Doc/Data	\Box													
Equip/Tooling														
Handling/Pre														
Material														
Operator														
Offset/Setup														
Process					,									
Supplier														
Training	Ш													
Transport	Ш						ł							
Unapproved	Ш	_												·.
							FA	ULT CA	TEGORY					
Landi	ng G	iear			·	General		1 .		_	7	г	¬ .₋	
-		Bending				Bend	<u> </u>	-	Program	\vdash	Outside Dim	- -	Pressure/Force	d
	Ш	Centre N	ot Concen	itric		BOM/Route	<u></u>	Grain		<u>_</u>	Over/Under		Set-up	
	$ldsymbol{}$	Cracks				Broken/Damage/Defect		Hardwa		\vdash	Part Incorre	l l	Temperature/C	Cure
1 -	Crimp/Kink/Ripple/Wave			Burrs		4 '	tion Incomplete/Unqualified	\perp	Part Lost/M	issing	Weld			
	Cuffs			Contamination	L	4	tions Incomplete/Unclear		Part Moved	L	Wrong Stock Pi	ulled		
	-	Crushing				Countersink		-	gned/off center	-	Positioned V			
	-	Heat Trea				Cut Too Short	<u>_</u>	Mislab		L	Power Loss/	Surge	Other	
	-	'	n Strip in	Tube		Drawing		Misrea						·
		Marks/Cl	natter			Drill Holes		Off-set						
		Turning S	Sequence			Finish		Out of	Calibration		<u> </u>			
		Wave/Tw	ist in Tub	ie.		Fit/Function	1	Out of	Sequence					

Work Order ID 121223 June-18-14 1:55:23 PM				*12	1223*							Page	e 2
Item ID: Revision ID: Item Name:	D3454-3 Bushing			Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date Reference:	6/18/14 :: 6/18/14	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item 1 Customer:	ID:							
Approvals:	Process QC:	Plan:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop	~!\ <u>\</u>	R1* R2*	: :
Sequence ID/ Work Center I 150 *150* Packaging	TD	Operation Description Identify as per dwg & Sto	ock Location	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	DAS 26 9-89

0.00

0.00

160

1 AN

Quality Control

QC21- Final Inspection - Work Order Release

Memo

MW-14-08

DQA:			Date:										TAART	
						WORK ORDER NON-	-CC	ONFO	RMANCE / UF			–	AEROSPACE	
QA Closed:			Date:						····	W	ork Order up	date only		
Work Orde	ar.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
WOIK OIG	٠					Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering	
Part N	۷o.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality	
	•					Use-as-is			noforming	Finishing	4	re/Packaging	Other	
NCR I	No.					Suspected Unapproved			Large Fab	Composite]	Supplier		
				,							1			
Root					Desc	ription of work order update	l	Initial	Acti		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	iption	Date	Verification	QC Inspector	
Design	Ш													
Doc/Data	Ш								i					
Equip/Tooling	Щ													
Handling/Pre	Щ													
Material	Щ													
Operator	Щ													
Offset/Setup	Н													
Process	Н													
Supplier	\vdash													
Training	\vdash							•						
Transport	Н				,									
Unapproved	<u> </u>		L		<u> </u>		FΔ	UIT CΔ	TEGORY		<u> </u>			
Landi	nø G	Sear				General		<u> </u>				**		
Lana		Bending	•			Bend	Г] Folio/F	Program		Outside Dim	ensions	Pressure/Forced	
	Н	Centre N	ot Concer	ntric		BOM/Route		Grain	J		Over/Under	tolerance	Set-up	
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	cí 🗍	Temperature/Cure	
		4	nk/Ripple	/Wave		Burrs		-	ion Incomplete/Un	nqualified	Part Lost/M	issing	Weld	
	Crimp/Kink/Ripple/Wave Cuffs			Contamination		Instruc	tions Incomplete/L	Inclear	Part Moved		Wrong Stock Pulled			
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong		
		Heat Trea				Cut Too Short		Mislab	=		Power Loss/	Surge	Other	
		Inspectio	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Cl	natter			Drill Holes		Off-set						
		Turning S	Sequence			Finish		Out of	Calibration					
,	Wave/Twist in Tube		vist in Tul	be		Fit/Function		Out of Sequence						

Picklist Print

June-18-14 1:55:26 PM

Work Order ID: 121223

121223

Parent Item:

D3454-3

D3454-3

Parent Item Name: Bushing

Start Date: 6/18/14

Required Date: 6/18/14

Ex 14-07-07

Page 1

Start Qty: 40.00

Required Qty: 40.00

Comments:

IPP rev. A 05.11.17

new issue

EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No			100	f	77.1120	0.06	3			

M303R0 750

303 Round Bar 0.750

Location	Loc Qty	Loc Code	
MAT028	77.112		
m127464	46.782		
m128882	0.196		
m129366	30.134		x4.

DQA:			_ Date: _.			•									DART
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UI		Wo	ork Order up	odate only	7	AEROSPACE
				-		DISPOSITION				AGAINST	DEF	PARTMENT	/PROCESS		
Work Ord	er: .										\neg	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			5
						Rework			Skid-tube	Crosstube Small Fab	\dashv	Dro	Water Jet d. Eng. Coor.	\dashv	Engineering Quality
Part i	10.					Scrap Use-as-is			Machining	Finishing	-		re/Packaging	\dashv	Other
NCR I	Jo					Suspected Unapproved		HEII	Large Fab	Composite	\dashv	necy sto	Supplier	┪	
·	•0.					Suspected Stuppioved	ı		24.86.42	••····p••···•[l	, <u> </u>	_	
Root					Desc	ription of work order update	-	nitial	Act	ion		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	ription		Date	Verification	\perp	QC Inspector
Design															
Doc/Data						·									
Equip/Tooling											l				
Handling/Pre														ı	<i>,</i>
Material															
Operator															
Offset/Setup											Ì			١	
Process															
Supplier				<u> </u> 											
Training															
Transport					,		ļ								
Unapproved					<u> </u>		<u> </u>	100-00-					<u></u>		
							FA	ULT CA	TEGORY						
Landi	ng (Gear			_	General	_	1 .				ĭ	Г	_	
	_	Bending			_	Bend		1	Program		\vdash	Outside Dim	F-	-	Pressure/Forced
		Centre N	ot Concer	ntric	<u> </u>	BOM/Route	<u> </u>	Grain			lacksquare	Over/Under	<u> -</u>	_	Set-up
	<u> </u>	Cracks			_	Broken/Damage/Defect		Hardwa				Part Incorre	-	_	Temperature/Cure
	<u> </u>	Crimp/Ki	nk/Ripple	/Wave	<u> </u>	Burrs	$oxed{oxed}$	4	ion Incomplete/Ur			Part Lost/M		-	Weld
	Cuffs		<u> </u>	Contamination		4	tions Incomplete/l	Unclear		Part Moved	_		Wrong Stock Pulled		
		Crushing				Countersink		-1	gned/off center		_	Positioned \			
		Heat Trea			_	Cut Too Short		Mislab				Power Loss,	/Surge		Other
		Inspectio		Tube	_	Drawing		Misrea							
	<u>_</u>	Marks/Cl				Drill Holes		Off-set							
		Turning S				Finish	_	-1	Calibration						
	Wave/Twist in Tube			oe		Fit/Function		Out of	Sequence						

DART AEROSPACE LTD	Work Order:	17/463
Description: Bushing	Part Number:	D3454-3
Inspection Dwg: D3454 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.316	+0.005/-0.000	-317			Vecn	01-16
Ø0.435	+0.000/-0.005	.433				
0.400	+0.005/-0.000	.402			HG	
0.060	+0.010/-0.000	-069			Nolu	
Ø0.75	+0.008/-0.001	.750			V-	~
	7 - 3 - 0 90					
						·
				ļ <u>.</u>		
			ļ			
					<u> </u>	
	 					

Measured by:	Audited by:	MM	Prototype Approval:	N/A
Date: 14-6-27	Date:	14/07/67	Date:	N/A

D	Data	Change	Revised by	Approved
Rev	Date		KJ/JLM	
Δ	06.09.01	New Issue		
		Dimension 0.060 was 0.60	KJ 9K)	
В	10.03.31_	Dimension 0.000 was 0.00	17)	77
			()	•



DESIGN RF		DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECK	TED #	APPROVED #	D3454	REV. B SHEET 1 OF 1	
05.12.05			TITLE BUSHING	SCALE 2:1	
A	05.09.02		NEW ISSUE		
В	05.12.05		REVISE -5/-7		

RELEASED 05.12.09

.400 -316 C^{+0.005} ØA^{+0.005} R0.020 ØB+0.000 .435 0.015 x 45° CHAMFER -060 D^{+0.010} -0.000

D3454-X

1) SPECIFICATION: D3454-X BUSHING



WHERE 'X' IS THE SIZE PER THE FOLLOWING TABLE:

UNCONTROLLED CORN **ENGLISHMO**

SHOP COPY

DASH No.	A (in)	B (in)	C (in)	D (in)	E (in)
-1	0.316	0.435	0.420	0.060	1.00
-3	0.316	0.435	0.400	0.060	0.75
-5	0.250	0.372	0.400	0.060	0.75
-7	0.250	0.372	0.343	0.060	0.75

- 1) MATERIAL: AISI 303 SS ROUND BAR (REF. DART SPEC. M303R) 2) FINISH: NONE
 3) IDENTIFY WITH P/N USING FINE POINT PERMANENT MARKER
 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 5) ALL DIMENSIONS ARE IN INCHES
 6) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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